CSC 3620 – Project 4

This assignment is about using Vue to build a simple web application.

Overview

In this assignment you will build a Pokemon collecting program to leverage all the various things we have learned in Vue up to this point.

Setup

Set up a new Vue 3 project. You'll want to include the router and vuex for your project. You will also need to set up a Firebase project and create a Firestore for your data.

Routing

In this project you will set up some simple routing for the single-page application. You'll need to set up routes for the home page (/), the collection page (/collection), and the store page (/store).

Components

Home – This component represents the home page on the site.

Header – This component represents the header/nav bar that shows on all pages.

Collection – This component contains a display of all the Pokemon in your collection

Store – This component shows a list of Pokemon you can acquire for your collection

Pokemon – This component represents a single Pokemon for sale in the store.

MyPokemon – This component represents a single Pokemon in your collection.

Vuex Store

For this project you will be creating a Vuex store to centralize your data. For your state you should have collection which is an empty array of Pokemon to start and storePokemon which is the available Pokemon for the store page. Each Pokemon object should have a name, a level, and a style (bootstrap theming colors noted in the table). See below for the initial Pokemon to create. If you wish to add additional Pokemon you may.

Name	Level	Type
Squirtle	1	Info
Bulbasaur	1	Success
Charmander	1	danger
Pikachu	1	warning

You will also need some getters, mutations, and actions for this project.

Getters

storePokemon(state) – Provides the array of Pokemon available in the store

collection(state) – Provides the user's current collection of Pokemon

collectionSize(state) – Provides the size of the user's current collection of Pokemon

Mutations

addPokemon(state, pokemon) – This will add a new Pokemon to the collection. **WARNING**: passing objects happens by reference. You'll need to clone the Pokemon passed from the store otherwise all the pokemon of a particular type will be the same object in your collection. To do this use Object.assign({}, pokemon) to make a new Pokemon before adding it to the collection.

deletePokemon(state, index) – This will delete the indexed Pokemon from the collection.

trainPokemon(state, data) – This will set the collection of Pokemon to be whatever is provided. See actions below for more details.

Actions

loadData(commit) – This action will use a GET request to pull the Pokemon collection from Firebase and then pass the resulting data to the loadPokemon mutation.

Firebase

For this project you'll be using Firebase to set up a Firestore for loading and store the Pokemon collection. These features will be called from the nav/header.

Header

At the top of all the pages will be the navigation and header. This should include links to the Collection and Pokemon Store pages, a drop-down menu with Save Data and Load Data, and a counter for showing how many Pokemon are in the collection.

Home

On the home page you should display the provided text and at the bottom show the accurate count of the Pokemon collection's size.

Collection

This page should show a note that you have no Pokemon if the collection is empty. If there are Pokemon each Pokemon should be represented. On this page Pokemon have a Train option that increases the level of that Pokemon by 1. They also have a Release option which removes the Pokemon from the collection.

Store

This page should show all of the available Pokemon for purchase. On this page Pokemon have a Get option which adds one of the chosen Pokemon to the collection. There is no restriction on having more than one of a particular Pokemon in the collection.

Transitions

When changing pages on the site, there should be a slide-style transition applied to the change. When a Pokemon is deleted from the collection use a transition/animation to remove it with a little flourish.

Grading

To Earn a C

- Site pages and routing are setup properly
- Nav bar is done and page links working properly
- Home page is set up properly
- Store page is properly showing Pokemon
- Collections page is properly showing Pokemon
- Getting a Pokemon from the store adds it to your collection properly

To Earn a B

- Complete all C tasks plus
- Home page and nav are showing correct Pokemon count
- Train and release are both working properly for the Pokemon collection

To Earn an A

- Transitions/animations working properly

- Load and save via Firebase working properly
- No other issues or deviations present in project